

REMARKS/ARGUMENTS

The claims are 2, 3, 6-8, 11-27 and 34 with claims 28-33 having been withdrawn by the Examiner as directed to a non-elected invention. Claims 1, 5, and 10 have been canceled in favor of new claim 34. Accordingly, claims 2, 3, 6-8, 11-17, 19, 20, 24, and 26, which previously depended on claim 1 have been amended to depend on new claim 34. These claims and claims 18, 21-23, 25 and 27 have also been amended to improve their form. In addition, claim 18 has been amended to depend on claim 17 and claims 4 and 9 have been canceled. Reconsideration is expressly requested.

Claims 1, 6-9, 12 and 15 were rejected under 35 U.S.C. Section 102(b) as being anticipated by *Persson et al. U.S. Patent No. 5,076,924*. Claims 1-2, 7-8, 12, 14, 17-19 and 26-27 were also rejected under 35 U.S.C. 102(b) as being anticipated by *Lisson et al. U.S. Patent No. 6,096,117*. Claims 1-2, 7-8, 12, 16, 20-22 and 26-27 were rejected under 35 U.S.C. 102(e) as being anticipated by *Simone U.S. Patent No. 6,514,408*. Claims 1,3, 11-12, 14, 20 and 22-27 were rejected under 35 U.S.C. 102(e) as being anticipated by *Adams et al. U.S. Patent Application Publication No. 2002/0130064*. Claims 4-5 and 10 were rejected

under 35 U.S.C. Section 103(a) as being unpatentable over *Adams et al.* in view of *Denton et al. U.S. Patent Application Publication No. 2002/00144942*. Claim 13 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over *Simone* in view of *Sprenger et al. U.S. Patent No. 6,415,930*.

Essentially, the Examiner's position was that each of *Persson et al.*, *Simone* and *Adams et al.* discloses the filter material or body recited in the rejected claims except for the number of weld joints and the opening diameter, which is said to be taught by *Denton et al.* and except for a coarser of grid structure disposed between two grid members, which is said to be shown by *Sprenger et al.*

In response, Applicant has canceled claims 1, 5, and 10 in favor of new independent claim 34, which incorporates subject matter previously appearing in claims 1, 5, and 10, thereby obviating the rejection over *Persson et al.*, *Lisson et al.*, *Simone* and *Sprenger et al.*, and the anticipation rejection on the basis of *Adams et al.* With respect to the rejection under 35 U.S.C. Section 103(a) over *Adams et al.* in view of *Denton et al.*, Applicant respectfully traverses for the following reasons.

As set forth in new claim 34, Applicant's invention provides a filter material comprising first and second stacked lattice elements having a welded connection between the lattice elements. The filter material has more than 20 welded connections per 1.0 sq. cm. and one of the lattice openings has lattice elements with openings with a diameter of less than 2.0 mm.

Prior to Applicant's invention, it was feared that the welded connections would impair too much the free crossing surface of the filter, especially in the case of particularly narrow-mesh lattice elements; however, as described in the Specification, Applicant has been able to surprisingly make possible the welding together of especially narrow filter materials with a plurality of welded connections per square centimeter and thereby provide many small welded points so as not to impair the free crossing surface of the filter material. In fact, the combination of the features, as set forth in new claim 34, namely, the narrow mesh of the filter elements with the plurality of the welded connections per square centimeter, results in a filter material which opens up a number of practical applications which cannot be met by any of the filter materials in the cited art.

*Adams et al.* fails to disclose or suggest a filter material having more than 20 welded connections per 1.0 sq. cm. with one of the lattice elements having openings with a diameter of less than 2.0 mm. *Adams et al.* shows glued screens for shale shakers in which a screening material is secured onto a tubular frame having a plurality of cross members that extend between and whose ends are connected to sides of the frame. *Adams et al.* also shows a screen with a lower base, support or frame, three undulating mesh screens on and/or bonded to the frame, and an upper mesh or screen. The screens may be mechanically connected or bonded together and rubber strips, plastic strips tape, cushion or cushions may be positioned between the screen and the upper screen. Although *Adams* states at paragraph 155 that the screen may be any known screen, there is no disclosure or suggestion of Applicant's filter material as recited in new claim 34 having more than 20 welded connections per 1.0 sq. cm. and one of the lattice elements having openings with a diameter of less than 2.0 mm.

The defects and deficiencies of the primary reference to *Adams et al.* are in no way remedied by the secondary reference to *Denton et al.* In *Denton*, the filter material is arranged as a

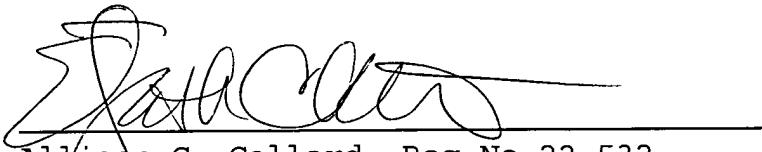
curved tube in cross section between two supports and is welded only at the bending points. Although paragraph 46 of *Denton* discusses an aviation fuel microfilter in which the screen has an array of 0.090 inch x 0.090 inch square openings, and paragraph 0047 of *Denton* refers to a pleat configuration of about 7 to about 20 attachment points per axial inch, there is no disclosure or suggestion of a filter material having the combination of features recited in claim 34, namely, the narrow mesh of the filter elements with the plurality of welded connections per square centimeter. In *Denton*, because welding is done only at the bending points, the filter surface can be completely filled by a weld bead, without substantially altering the filter efficiency. Therefore, *Denton* is entirely unconcerned with the problem faced by Applicant, and one skilled in the art would have no reason to combine *Denton* with *Adams et al.* in an effort to arrive at the filter material recited in Applicant's new claim 34.

The remaining references cited by the Examiner have been considered but are believed to be no more relevant. None of these references disclose or suggest the filter material as recited in Applicant's new claim 34. Accordingly, it is

respectfully submitted that new claim 34 and claims 2, 3, 6-8, 11-27, which depend directly or indirectly thereon, are patentable over the cited references.

In summary, claims 1, 4, 5, 9, and 10 have been canceled. Claims 2, 3, 6-8 and 11-27 have been amended, and new claim 34 has been added. In view of the foregoing it is respectfully requested that the claims be allowed and that this application be passed to issue.

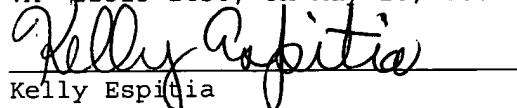
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I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 16, 2006.

  
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